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**Cheng et al.**

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- (54) **METHODS USING INTELLIGENT DOOR LOCK SYSTEM**
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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 294 days.  
This patent is subject to a terminal disclaimer.

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- (51) **Int. Cl.**  
**E05B 47/00** (2006.01)  
**G07C 9/00** (2006.01)
- (52) **U.S. Cl.**  
CPC ..... **E05B 47/0012** (2013.01); **G07C 9/00031** (2013.01); **G07C 9/00134** (2013.01); **G07C 9/00857** (2013.01)

- (58) **Field of Classification Search**  
CPC ..... G07C 2009/00269; G07C 9/00031; G07C 9/00134; G07C 9/00182; G07C 9/00309; G07C 9/00857; E05B 47/0012

See application file for complete search history.

(57) **ABSTRACT**

A method is provided for using an intelligent door lock system at a door. The intelligent door lock system is supplied to an individual. The intelligent door lock system includes, a position sensing device, an engine, a circuit coupled to the engine, an energy source coupled to the circuit and a device that converts energy into mechanical energy. The position sensing device of the intelligent door lock system is coupled to a drive shaft of a lock device, and the position sensing device is coupled to the circuit. Energy is supplied from the energy source to the device that converts energy into mechanical energy. The device that converts energy into mechanical energy rotates the drive shaft sufficiently to unlock or lock a lock of the lock device.

**18 Claims, 40 Drawing Sheets**

